

Work Order ID 109092

November-11-13 1:49:20 PM

109092

Page 1

Item ID:	D3009-3	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:						*NS2*
Item Name:	Cup					
Start Date:	11/11/13	Start Qty:	60.00	*60*	Cust Item ID:	
Required Date:	11/25/13	Req'd Qty:	60.00	*60*	Customer:	

Reference:

Approvals:	Process Plan:	MLS	Date: 13-11-11	Tooling:		Date:	Run	Start	*NR1*
	QC:		Date:	SPC (Y/N):		Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
100		0.00							
100 Hardinge Hardinge CNC Lathe Small	Hardinge CNC LATHE SMALL		DAS	44	9-89	13/11/14	60	0	
	Memo	0.00							
	1-TURN AS PER FOLIO FA130 & DWG D3009								
	FOLIO REV:								
	DWG REV: B								
	2-DEBURR AS REQUIRED								
110	QC2- Inspect parts off machine FAI/FAIB	0.00	DAS	44	9-89	13/11/14	60	0	
110 QC Quality Control	Memo	0.00							

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____		DISPOSITION			AGAINST DEPARTMENT/PROCESS										
Part No. _____		Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>							
NCR No. _____		Suspected <input type="checkbox"/>	Unapproved <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>							
Root Cause		Date	Step	Qty	Description of work order update or non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector				
Design															
Doc/Data															
Equip/Tooling															
Handling/Pre															
Material															
Operator															
Offset/Setup															
Process															
Supplier															
Training															
Transport															
Unapproved															
FAULT CATEGORY															
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube					General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function			<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence				<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled	

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Page 2

Item ID:	D3009-3	Accept	*N900040100*	Setup	Start	*NS1*	
Revision ID:				Stop		*NS2*	
Item Name:	Cup						
Start Date:	11/11/13	Start Qty: 60.00	*60*	Cust Item ID:			
Required Date:	11/25/13	Req'd Qty: 60.00	*60*	Customer:			
Reference:							
Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:	Stop		*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check	0.00	DAS 40 9-89	13/11/16		60	0		
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: WA001	0.00							
	Memo	0.00							
	*****STOCK IN LARGE FAB*****								
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release	0.00							
	Memo	0.00							

PLB-11-19

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order: _____
 Part No. _____
 NCR No. _____

DISPOSITION

Rework
Scrap
Use-as-is
Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

Skid-tube
Machining
Thermoforming
Large Fab

Crosstube
Small Fab
Finishing
Composite

Water Jet
Prod. Eng. Coor.
Rec/Store/Packaging
Supplier

Engineering
Quality
Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear		General									
		Bending	Bend	Folio/Program	Outside Dimensions			Pressure/Forced			
		Centre Not Concentric	BOM/Route	Grain				Set-up			
		Cracks	Broken/Damage/Defect	Hardware				Temperature/Cure			
		Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified				Weld			
		Cuffs	Contamination	Instructions Incomplete/Unclear				Wrong Stock Pulled			
		Crushing	Countersink	Misaligned/off center							
		Heat Treat	Cut Too Short	Mislabeled				Other			
		Inspection Strip in Tube	Drawing	Misread							
		Marks/Chatter	Drill Holes	Off-set							
		Turning Sequence	Finish	Out of Calibration							
		Wave/Twist in Tube	Fit/Function	Out of Sequence							

Picklist Print

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Page 1

Work Order ID: 109092

109092

Parent Item: D3009-3

D3009-3

Parent Item Name: Cup

Start Date: 11/11/13

Required Date: 11/25/13

Start Qty: 60.00

Required Qty: 60.00

Comments: IPP A 07.12.18new issue EC
 IPP Rev:B 08-01-08 ECN 1089 rev:b as per dwg DD veryfied by:ec

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304R1.000		Purchased		No		110	f	11.8660	0.0479	4			**

M304R1 000

304 round bar 1.00

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT012	11.866	
*m126726	11.866	

2.6 EK 13/11/14

DQA:

Date:



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date:

Work Order update only

Work Order:	
Part No.	
NCR No.	

DISPOSITION

- Rework
- Scrap
- Use-as-is
- Suspected Unapproved

AGAINST DEPARTMENT/PROCESS

- Skid-tube
- Machining
- Thermoforming
- Large Fab

- Crosstube
- Small Fab
- Finishing
- Composite

- Water Jet
- Prod. Eng. Coor.
- Rec/Store/Packaging
- Supplier

- Engineering
- Quality
- Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	Bending	<input type="checkbox"/> Bend	Folio/Program	<input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Pressure/Forced
	Centre Not Concentric	<input type="checkbox"/> BOM/Route	Grain	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Set-up
	Cracks	<input type="checkbox"/> Broken/Damage/Defect	Hardware	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Temperature/Cure
	Crimp/Kink/Ripple/Wave	<input type="checkbox"/> Burrs	Inspection Incomplete/Unqualified	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Weld
	Cuffs	<input type="checkbox"/> Contamination	Instructions Incomplete/Unclear	<input type="checkbox"/> Part Moved	<input type="checkbox"/> Wrong Stock Pulled
	Crushing	<input type="checkbox"/> Countersink	Misaligned/off center	<input type="checkbox"/> Positioned Wrong	
	Heat Treat	<input type="checkbox"/> Cut Too Short	Mislabeled	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other
	Inspection Strip in Tube	<input type="checkbox"/> Drawing	Misread		
	Marks/Chatter	<input type="checkbox"/> Drill Holes	Off-set		
	Turning Sequence	<input type="checkbox"/> Finish	Out of Calibration		
	Wave/Twist in Tube	<input type="checkbox"/> Fit/Function	Out of Sequence		

DART AEROSPACE LTD	Work Order:	109092
Description: Cup	Part Number:	D3009-3
Inspection Dwg: D3009	Rev: B	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X First Article Prototype

SAS

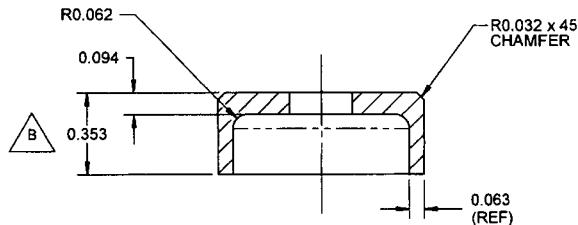
Measured by:	44 9-89	Audited by:	40 9-89	Prototype Approval:	N/A
Date:	13/11/14	Date:	13/11/16	Date:	N/A

Rev	Date	Change	Revised by,	Approved
A	08.01.22	New Issue	KJ/EC/DD	

8 7 6 5 4 3 2 1

D

D



SECTION A-A

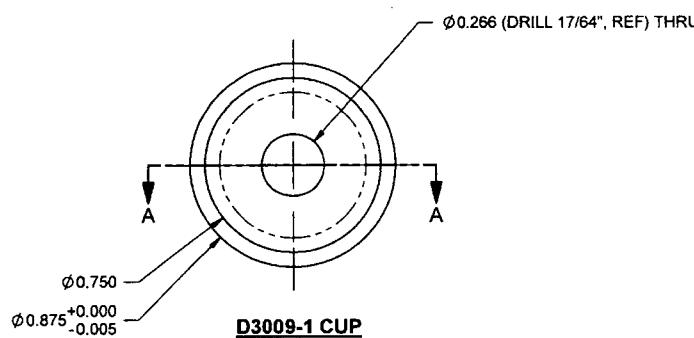
109092 MLJ
13-11-11

C

C

B

B



RELEASED
08.01.07

A

A



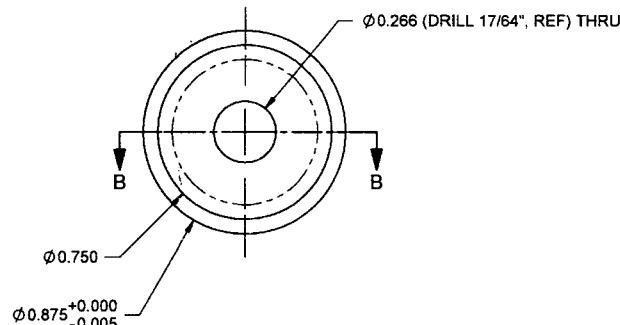
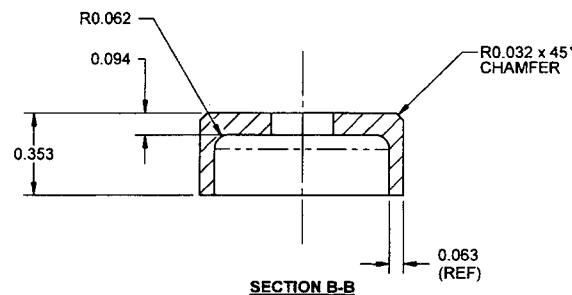
NOTES:

- 1) MATERIAL: AISI 1018-1025 ROUND BAR (REF DART SPEC M1018-R)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.03 lbs

B	REDRAW/REFORMAT DWG. D3009-1 MATL WAS 1010-1025 NOW 1018-1025 (A8). 0.353 WAS 0.363 (D7). Ø0.266 WAS Ø0.257 (C5). ADD D3009-3 (SHEET 2)	CP	07.12.12
A	NEW ISSUE	RF	01.03.23
REV.	DESCRIPTION	BY	DATE
	DESIGN 91	DART AEROSPACE LTD	
	DRAWN 91	HAWKESBURY, ONTARIO, CANADA	
	CHECKED B	DRAWING NO. REV. B	
	MFG. APPR. B	D3009 SHEET 1 OF 2	
	APPROVED B	TITLE SCALE	
	DE APPR. B	CUP 2:1	
	DATE 07.12.12	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL. AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



D3009-3 CUP

NOTES:

- 1) MATERIAL: AISI 304/316 STAINLESS STEEL ROUND BAR
(REF DART SPEC M304R)
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.03 lbs

8 7 6 5 4 3 2 1

DESIGN	<i>91</i>	DART AEROSPACE LTD	
DRAWN	<i>91</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>B</i>		
MFG. APPR.	<i>W</i>	DRAWING NO.	REV. B
APPROVED	<i>H</i>	D3009	SHEET 2 OF 2
DE APPR.	<i>H</i>	TITLE	SCALE
DATE	07.12.12	CUP	2:1

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06-01-07 J.W.